NOAA-CDC *Heat Health Summit*

Heat and Health in Maryland in an Era of Climate Change

NOAA Silver Spring Metro Complex

Silver Spring, MD

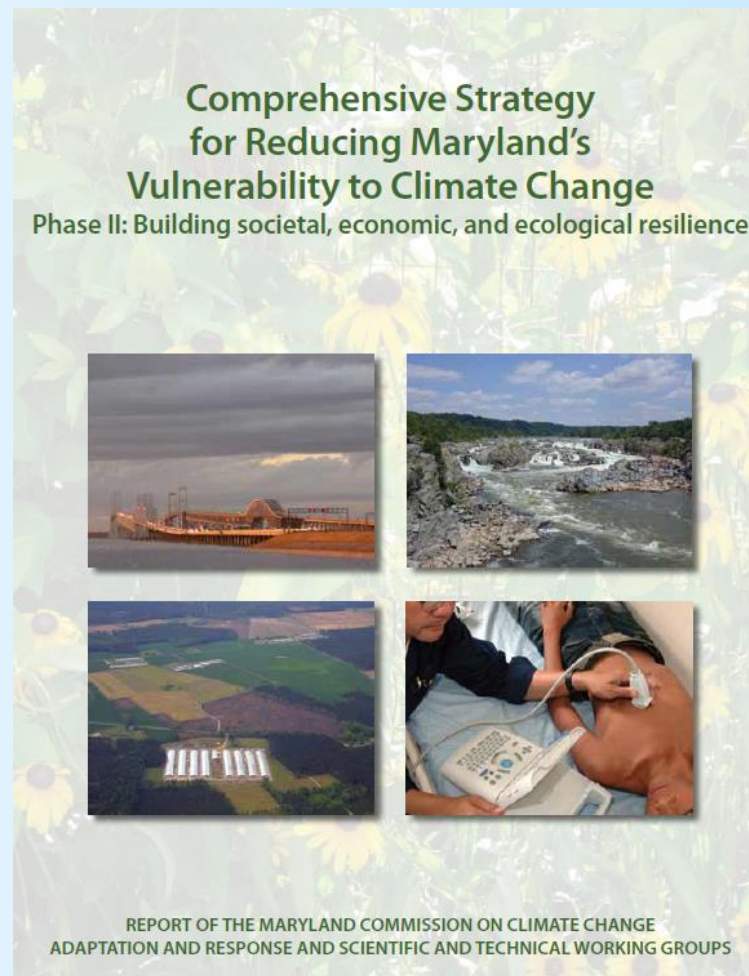October 28, 2014

How Do We Make Maryland "Weather-Ready" and "Climate Ready"?

- Relevance of forecasting time scales to public health planning purposes
- Extreme heat forecasts in the context of the Maryland Climate Change Action Plan
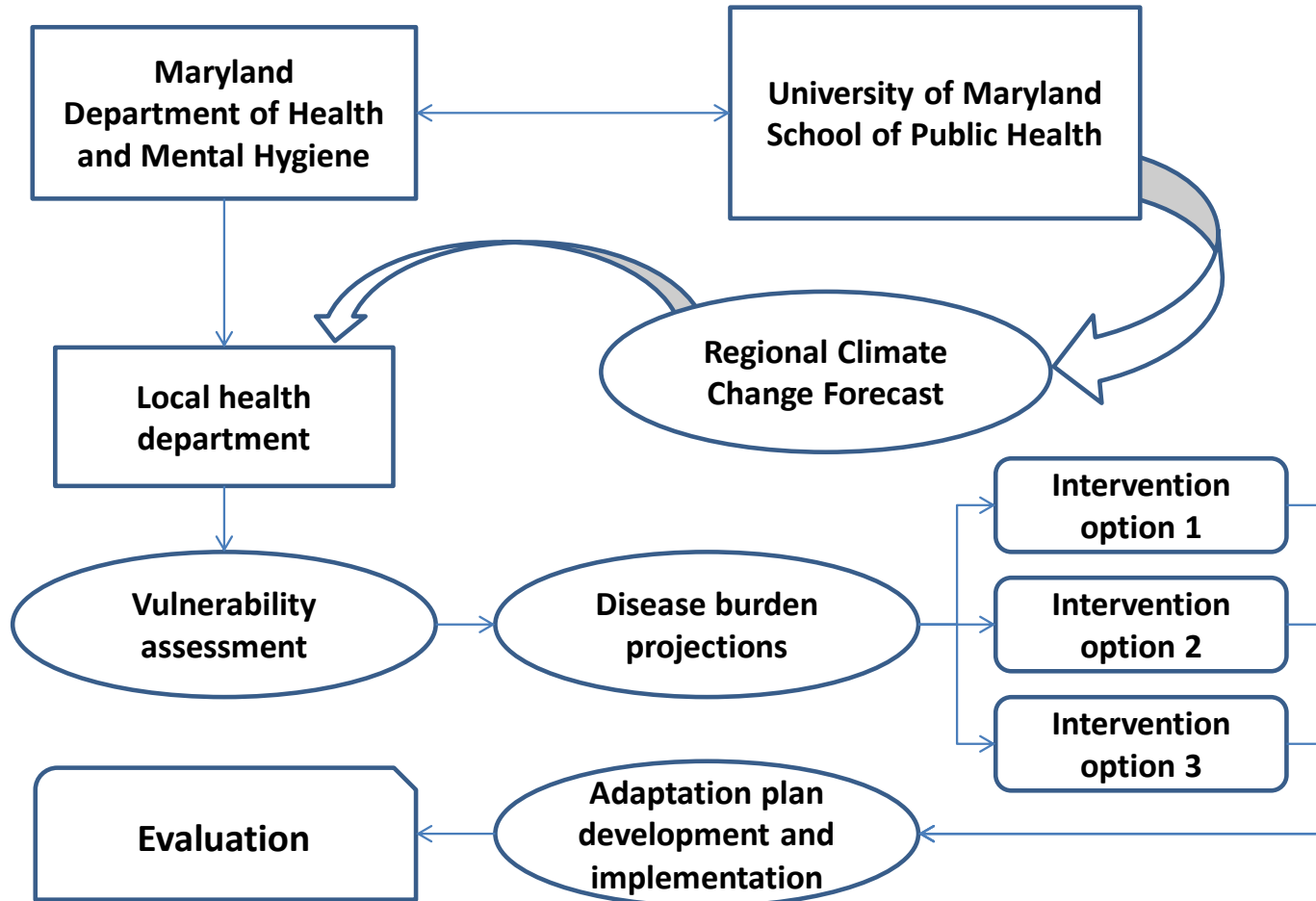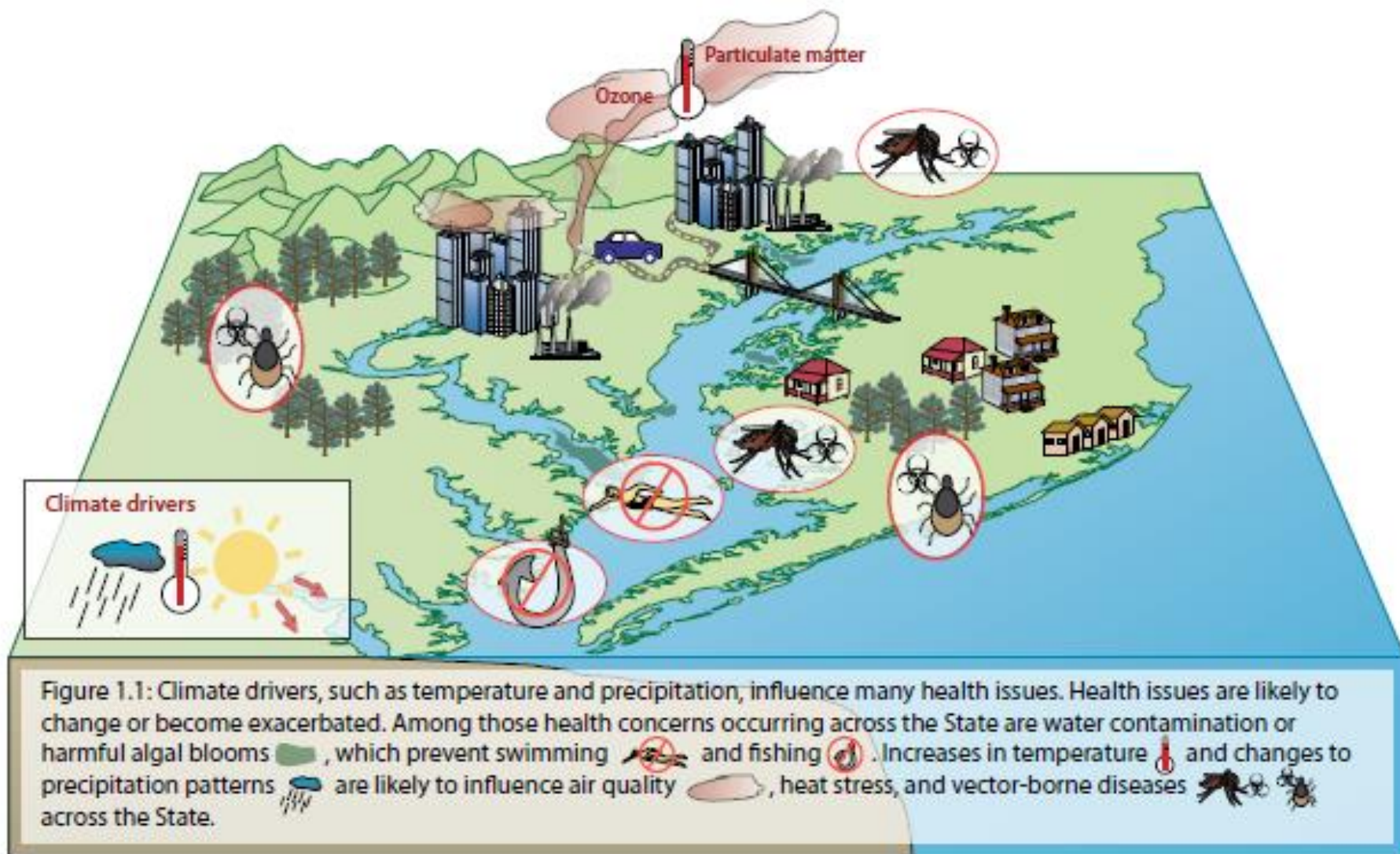- What does public health need?

Maryland's Climate Change Action Plan

- Climate change will cause increases in heat stress, reduced air and water quality, and shifts in vector borne disease risk.

- Reducing impacts should focus on integrating climate into decisions affecting health and increasing preventive measures.

- Preventive measures depend on Maryland's capacity to track current disease patterns and project future threats to human health.

Comprehensive Strategy for Reducing Maryland's Vulnerability to Climate Change
Phase II: Building societal, economic, and ecological resilience

REPORT OF THE MARYLAND COMMISSION ON CLIMATE CHANGE ADAPTATION AND RESPONSE AND SCIENTIFIC AND TECHNICAL WORKING GROUPS

Prevention and Health Promotion Administration
[Date]

Maryland Public Health Climate Change Strategy

Figure 1.1: Climate drivers, such as temperature and precipitation, influence many health issues. Health issues are likely to change or become exacerbated. Among those health concerns occurring across the State are water contamination or harmful algal blooms , which prevent swimming and fishing . Increases in temperature and changes to precipitation patterns are likely to influence air quality , heat stress, and vector-borne diseases across the State.
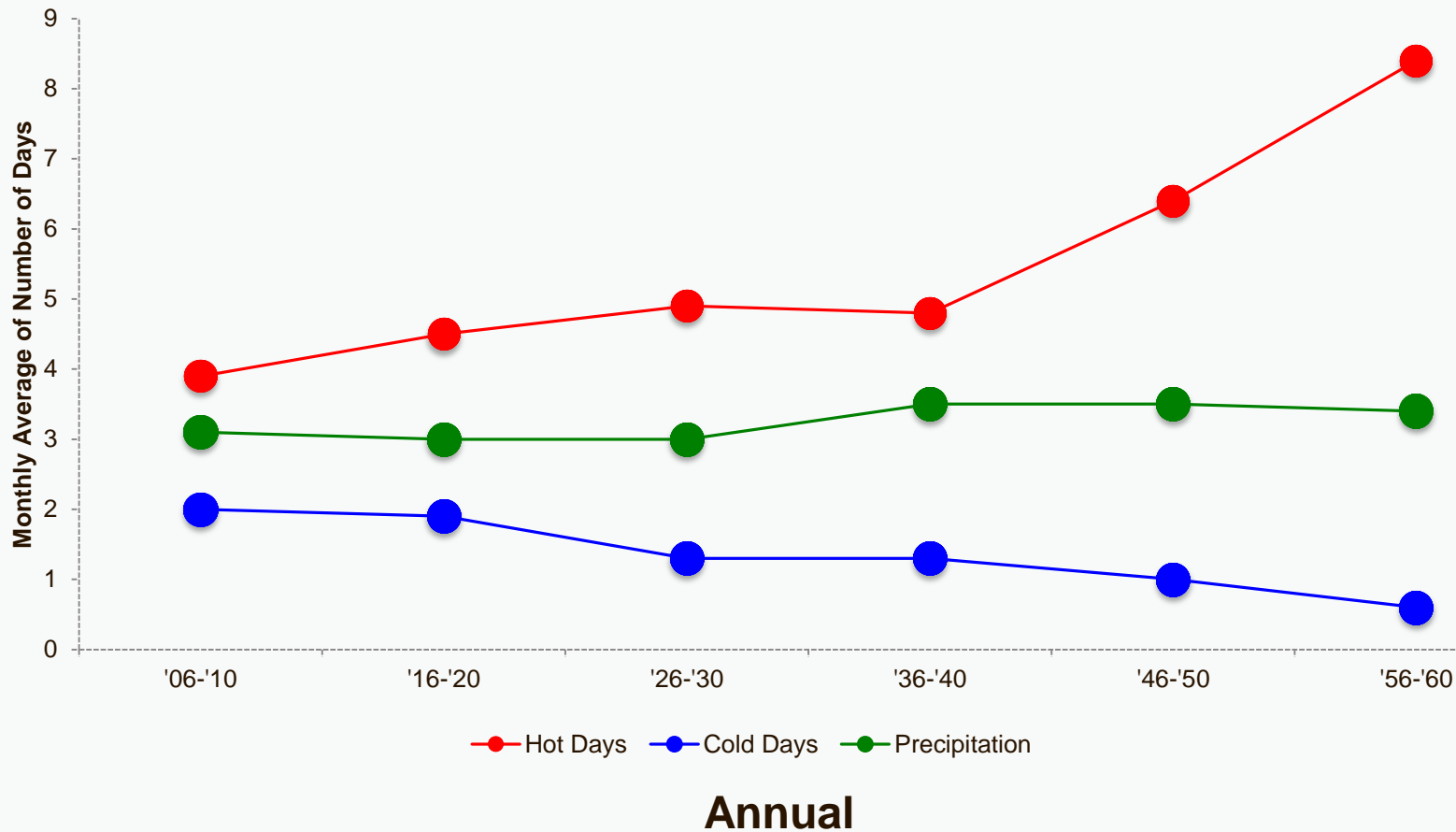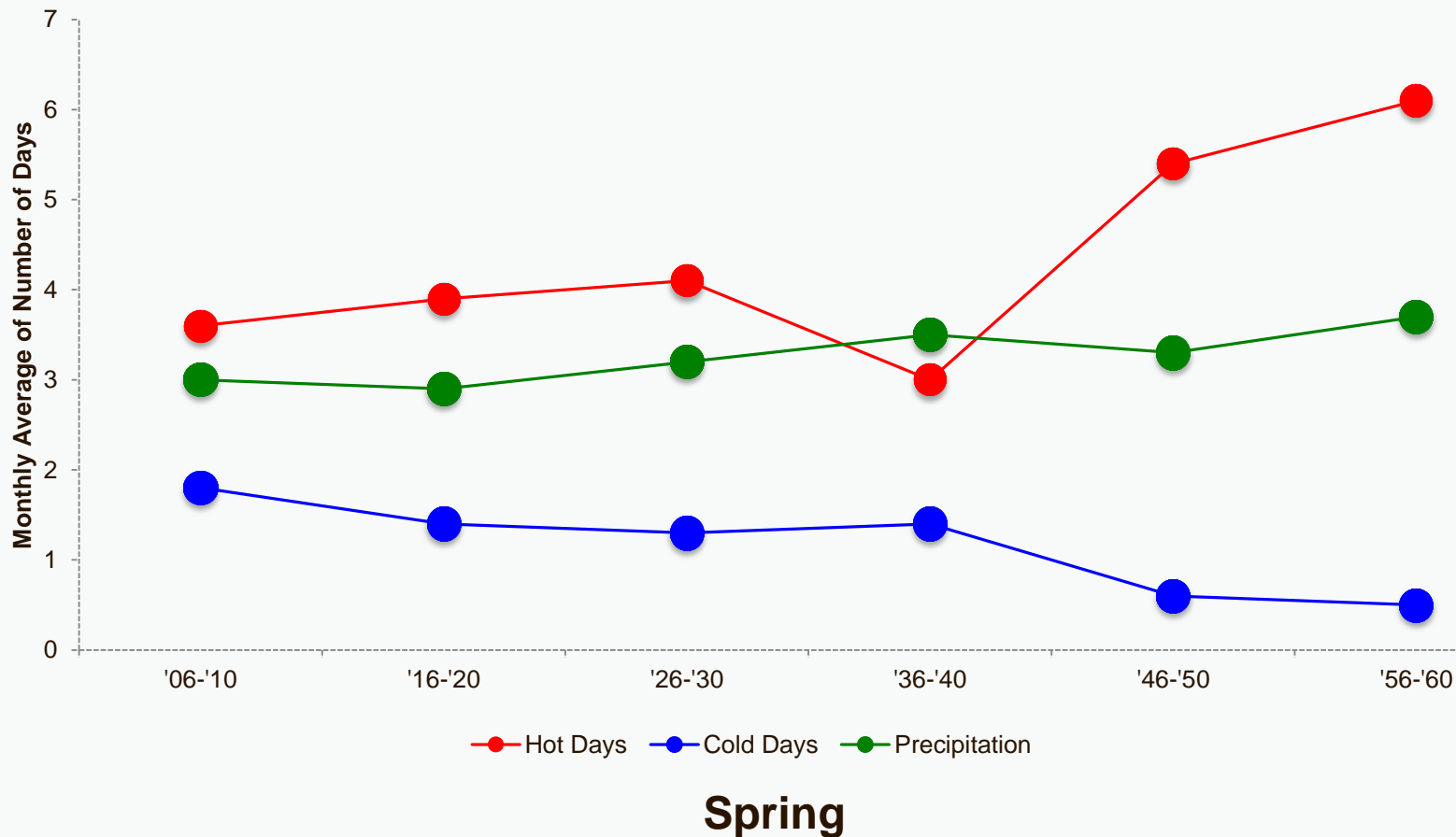
Three Examples

- Derecho and Extreme Weather Events
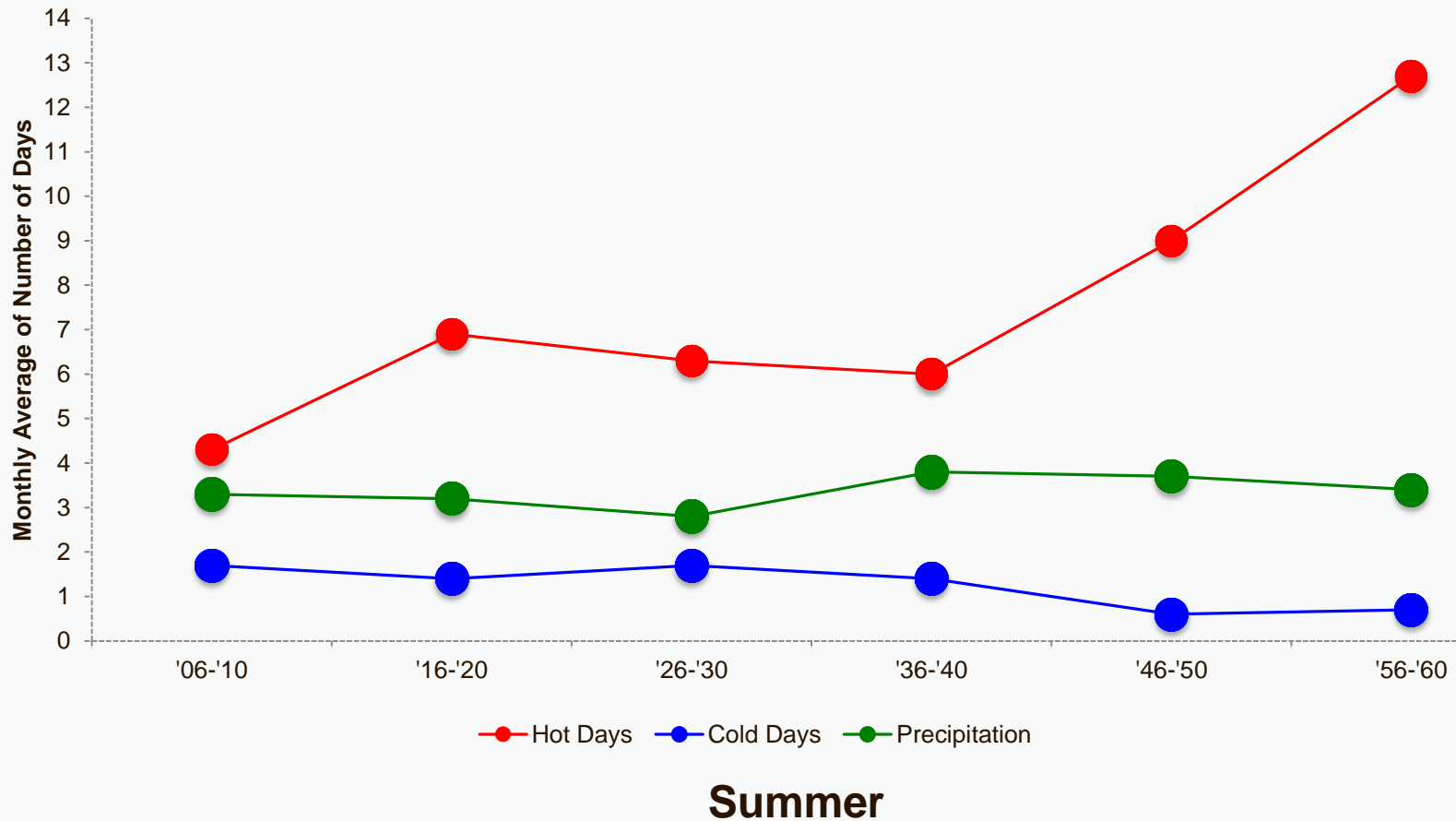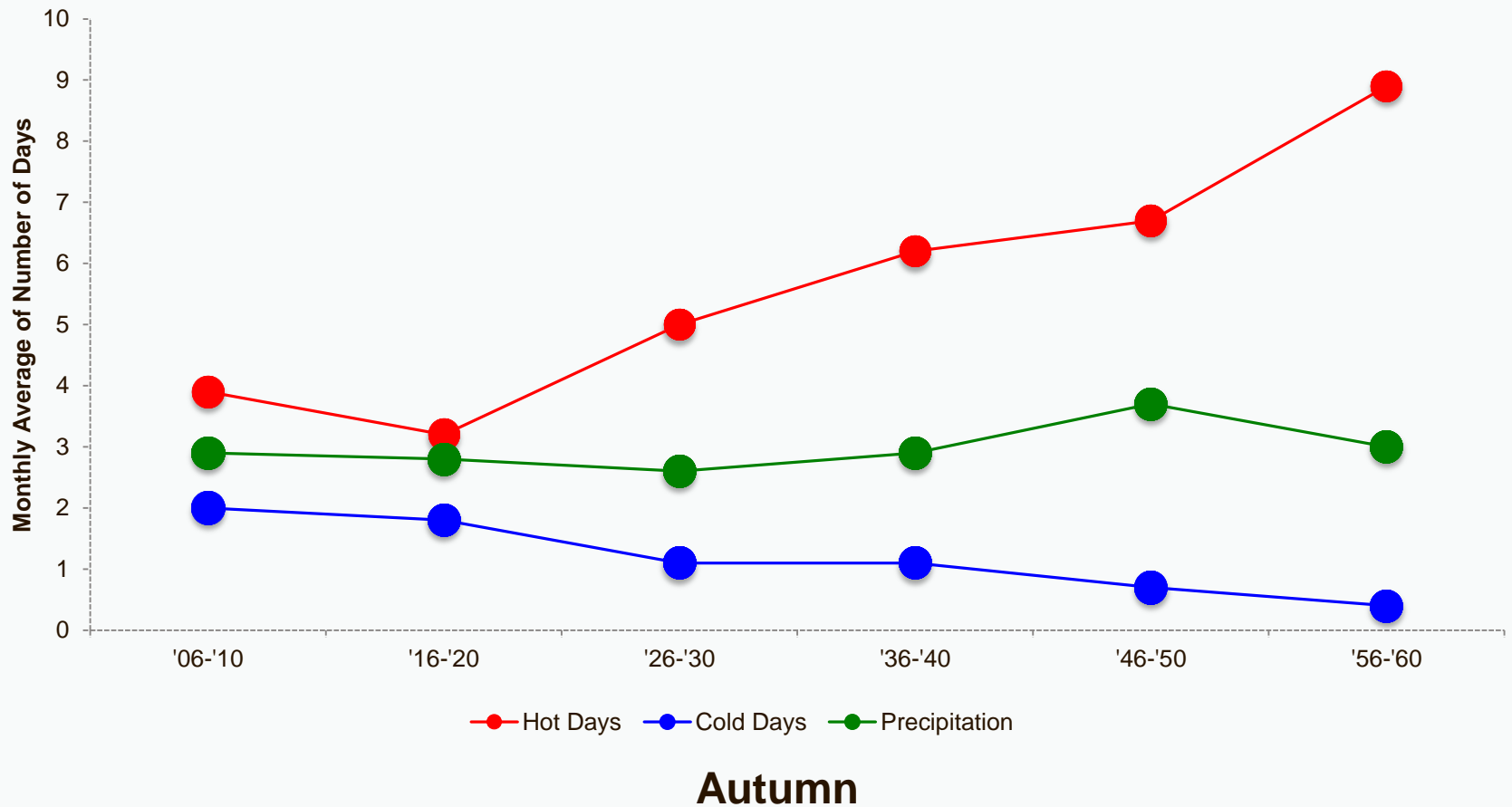- Asthma
- Lyme Disease

Climate Forecasts
(10th Percentile)

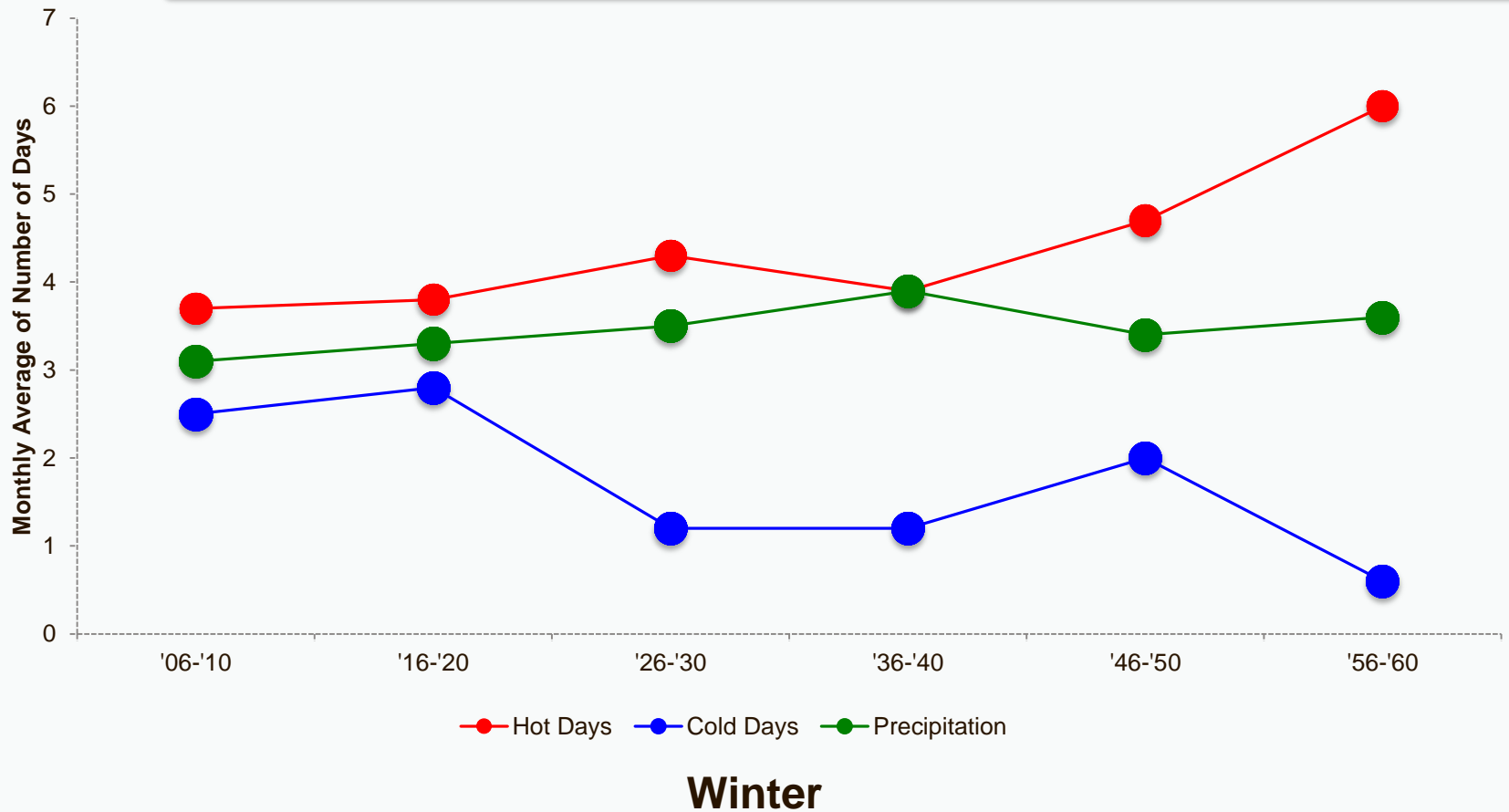# Climate Forecasts
(10th Percentile)

Climate Forecasts (10th Percentile)

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Climate Forecasts
(10th Percentile)

What Does It All Mean?

- Easy to predict hotter summers lasting longer, increasing number of very hot days

- Potential for increase in precipitation, pollen, mold growth

- Predictions of vector-borne diseases, HAB events more complex, involving multi-factorial phenomena

What is the Value of Predictive Models?

- Way to engage the public in the discussion

- Doesn't necessarily alter public health mission – all hazards at all times

- Predictive models for weather better than other biological-social forecasts – better prepared for heat than other temperature-related phenomena